

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method for routing information between a first host on a first network and a plurality of hosts on a second network, the method comprising:

establishing a routing path between the first host on the first network and one of the plurality of hosts on the second network, the plurality of hosts sharing a globally-routable network address;

establishing a routing table comprising a plurality of physical network addresses for the plurality of hosts on the second network, each of the plurality of physical network addresses associated with a respective unique identifier;

receiving a message from the first host, the message comprising a destination identifier associated with one of the unique identifiers;

determining a physical network address in the routing table using the destination identifier;

mapping the physical network address determined to the message; and
routing the message to one of the plurality of hosts using the physical network address.

2. (Cancelled)

3. (Original) The method of claim 1, wherein the routing path comprises a multiprotocol label switched path.

4. (Original) The method of claim 3, wherein the label switched path is established using a Resource Reservation Protocol.

5. (Original) The method of claim 3, wherein the destination identifier comprises a multiprotocol label.

6. (Original) The method of claim 1, wherein the physical network address comprises a medium access control address.

7. (Original) The method of claim 1, wherein the destination identifier is created during the step of establishing the routing path from the first host on the first network to the one of the plurality of hosts on the second network.

8. (Currently amended) A system for routing messages, comprising in combination:

- a local routing table comprising a plurality of physical network addresses and a unique identifier associated with each of the plurality of physical network addresses;
- a host on a first network;
- a plurality of local hosts on a second network, the plurality of local hosts having the plurality of physical network addresses and sharing a globally-routable network address;
- a local processing module for determining a physical network address upon a receipt of a message comprising a destination identifier from the host on the first network, wherein the local processing module determines the physical network address based on the destination identifier using the local routing table, the destination identifier is associated with the unique identifier,

and transmitting the message to one of the plurality of hosts on the second network using the physical network address.

9. (Original) The system of claim 8, wherein the plurality of physical network addresses comprises a plurality of medium access control network addresses, and the globally-routable network address comprises an Internet Protocol address.

10. (Original) The system of claim 8, wherein the identifiers comprise multi-protocol label switching labels.

11. (Currently amended) A method for transmitting data, the method comprising: establishing a routing path from a first host on a first network to a second host on a second network, the second host comprising a unique data link layer address and sharing a globally-routable network layer address with a plurality of hosts on the second network;

allocating a destination data-link layer identifier for the data link layer address associated with the second host;

storing the destination data-link layer identifier with the data link layer address associated with the second host in a routing table, the routing table comprising a plurality of data link layer addresses associated with the plurality of hosts on the second network, wherein each of the plurality of data link layer addresses is associated with a unique destination data-link layer identifier;

receiving a message from the first host on the first network, the message comprising the destination data-link layer identifier;

determining the data link layer address based on the received destination data link layer identifier using the routing table;

mapping the data link layer address to the message; and

routing the message to the second host using the data link layer address determined based on the destination data link layer identifier received in the message.

12. (Original) A computer readable medium having stored therein instructions for causing a processor to execute the method of claim 11.

13. (Original) The method of claim 11, wherein the routing path comprises a label switching path.

14. (Currently amended) The method of claim 11, wherein the destination identifier ~~data link layer identifiers~~ comprise a multi-protocol label switching label~~labels~~.

15. (Original) The method of claim 11, wherein the data link layer addresses comprises medium access control addresses, and the globally-routable network layer address comprises an Internet Protocol address.

16. (Original) The method of claim 11, wherein the message comprises Voice over Internet Protocol packet.

17. (Currently amended) A system for routing messages, comprising in combination:

a centralized routing module for generating a routing table for a switch module associated with a plurality of network entities sharing a globally-routable network address, the routing table comprising (i) a plurality of physical network addresses associated with the plurality of network entities, and (ii) a respective unique identifier associated with ~~wherein~~ each physical network address ~~is associated with an identifier~~; and

the switch module for receiving a data packet addressed to the globally-routable network address, the data packet comprising a destination identifier associated with one of the unique identifiers, the switch module determining a destination physical network address by mapping the destination identifier to one of the plurality of physical network addresses in the routing table and routing the data packet to a network entity associated with the determined physical network address.

18. (Currently amended) The system of claim 17, wherein each of the unique identifiers comprises a transport layer identifier, and the destination identifier comprises a data link layer identifier, and

the transport layer identifier is an identifier selected from the group consisting of (i) a User Data Protocol port identifier, (ii) a Transmission Control Protocol port identifier, and (iii) an Internet Control Message Protocol query identifier.

19. (Original) The system of claim 18, wherein the data link layer identifier comprises a multi-protocol label switching label.

20. (Currently amended) The system of claim 17, wherein the centralized routing module aggregates ~~each label to~~ at least one data flow associated with each of the plurality of network entities to a destination identifier.

21. (Original) The system of claim 17, wherein the centralized routing module allocates an identifier for each network host upon a receipt of a Resource Reservation Protocol message for each network host.

22. (Original) The system of claim 17, wherein upon the allocation of the identifier for each network host, a routing path is created for each host.

23. (New) The method of claim 1,
wherein each of the unique identifiers is a transport identifier, and
each transport identifier is an identifier selected from the group consisting of (i) a User Data Protocol port identifier, (ii) a Transmission Control Protocol port identifier, and (iii) an Internet Control Message Protocol query identifier.